Panels (P)
Planetary Protection (PPP.1)
Consider for oral presentation.

COSPAR WORKSHOP SERIES ON REFINING PLANETARY PROTECTION REQUIREMENTS FOR HUMAN MISSIONS TO MARS

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COSPAR and its space agency partners are supporting a multi-year stepwise process developing needed approaches to address planetary protection requirements for human missions beyond Earth orbit. The objective is to support incremental development from the current qualitative COSPAR planetary protection "Principles and Guidelines for Human Missions to Mars" to quantitative implementable planetary protection requirements for such future missions. The workshops and meetings in this series have involved participants from NASA, ESA, JAXA and other national space agencies, as well as the scientific/technical community, and commercial/private enterprise stakeholders, based around three main topic areas: Microbial and Human Health Monitoring; Spacecraft Technology and Operations, and; Natural Transport of Contamination at Mars. This presentation provides a status update on the findings of the COSPAR Meetings on this topic to date. First, the identification and prioritization of knowledge gaps will be summarized. Next, where a knowledge gap is to be addressed by new measurements, example descriptions of measurements needed to close the knowledge gaps (and instruments necessary to make those measurements) will be discussed. Where the knowledge gaps closure is based on Agency policy decisions, the scope of the decision-making parameters and process will be described. Lastly, the presentation will consider how the findings of the study series can be integrated into current and future space agency and COSPAR activities.